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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte SCOTT SMITH

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Appeal 2009-012260  
Application 10/630,562  
Technology Center 3700

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Before: JENNIFER D. BAHR, STEFAN STAICOVICI, and  
CHARLES N. GREENHUT, Administrative Patent Judges.

GREENHUT, Administrative Patent Judge.

DECISION ON APPEAL

## STATEMENT OF CASE

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1, 3, 6-8, 12 and 13. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

The claims are directed to a helically formed stent/graft assembly. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A stent/graft composite device formed from a flat preformed planar strip and stent assembly comprising:
  - an elongate preformed non-textile planar strip of polymeric graft material having a first exterior surface and a second opposed luminal surface; and
  - a planar stent attached onto one of said opposed flat exterior or luminal surfaces of said strip to form said flat strip assembly, said strip assembly being helically wound into a continuous tubular structure.

## REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Lau	US 6,165,210	Dec. 26, 2000
Leopold	US 6,352,561 B1	Mar. 5, 2002

## REJECTION

Claims 1, 3, 6-8, 12 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Leopold, and Lau. Ans. 3.

OPINION

Appellant argues claims 1, 3, 6-8, 12 and 13 as a group. App. Br. 4. We select claim 1 as the representative claim, and claims 3, 6-8, 12 and 13 will stand or fall with claim 1. See 37 C.F.R. § 41.37(c)(1)(vii).

Appellant argues that neither Leopold nor Lau discloses a “flat strip assembly of an elongate preformed non-textile planar strip of polymeric graft material and a planar stent.” App. Br. 6. However, claim 1 is directed to “[a] stent/graft composite device formed from a flat preformed planar strip and stent assembly.” The claim is not directed to the intermediate product from which the claimed device is formed, i.e., a flat preformed planar strip and stent assembly. In this case, we agree with the Examiner that Leopold discloses a planar strip 128 and Lau discloses a planar stent 126. Ans. 3. Furthermore, we note that it is impossible for the strip assembly of the claimed device to be both “planar” and “helically wound” at the same time. See Spec. 10, para. [0058] (expressly defining “planar” as a structure not defined by a vector to any large extent in a third dimension). Thus, we agree with the Examiner’s interpretation that the limitations of claim 1 relating to the planar nature of the strip and stent assembly are product-by-process limitations. Accordingly, we agree with the Examiner that helically winding a planar stent and strip that are already attached does not result in a structural difference in the claimed apparatus as compared to a device produced according to the teachings of Leopold and Lau wherein a stent 126 is helically wound prior to attaching it to tape 128, read as the claimed “strip of polymeric graft material.” Ans. 4. See also, Leopold, col. 9, ll. 25-27, col. 10, ll. 62-65, col. 11, ll. 54-57, fig. 3; Lau, col. 13, ll. 18-23, col. 14, ll. 43-52, fig. 10.

“The patentability of a product does not depend on its method of production.” In re Thorpe, 777 F.2d 695, 697 (Fed. Cir. 1985) (citing In re Pilkington, 411 F.2d 1345, 1348 (CCPA 1969)). “If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d at 697 (citing In re Marosi, 710 F.2d 799, 803 (Fed. Cir. 1983); Johnson & Johnson v. W.L. Gore, 436 F.Supp. 704, 726 (D. Del. 1977); and In re Fessmann, 489 F.2d 742 (CCPA 1974)). As the CCPA stated in In re Brown, 459 F.2d 531, 535 (CCPA 1972) (emphasis omitted):

[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith.

In effect, the USPTO bears a lesser burden of proof in making out a *prima facie* case of obviousness in a product-by-process situation because of its peculiar nature. Fessman, 489 F.2d at 744.

Appellant contends that:

as the inventive stent/graft composite device is formed from a flat planar strip assembly of planar graft material and a planar stent, the resulting device is structurally improved over the prior art because the assembly components, i.e., planar graft

and planar stent, may be more accurately positioned with respect to one and the other and better secured to each other to provide a stent/graft composite device with improved integrity, as described in the Specification at paragraph [00554] (sic [0054]).

App. Br. 7-8. Appellant has not provided sufficient evidence or technical reasoning to establish that producing a stent by the process described by claim 1, helically winding a planar stent and strip that are already attached, would result in a structure wherein the stent and graft are more accurately positioned or exhibit improved integrity as compared to a stent produced according to the teachings of Leopold and Lau.

Regarding the Examiner's proposed combination with Lau's planar stent, Appellant contends that the Examiner failed to provide a sufficient reason for the proposed modification and improperly resorted to hindsight. Reply Br. 2-3. First, as noted above, the limitation requiring a "planar stent" pertains to an intermediate product from which the claimed device is formed and does not result in a structural difference in the claimed apparatus itself. Second, it is clear from figures 1-15 of the Specification and the corresponding description that Appellant did not intend for the term "planar" to exclude a structure merely because it was formed from wire having a round cross section such as Leopold's. See e.g., Spec. p. 9, para. [0056], p. 13, para. [0071]; See also App. Br. 3 (citing wire 152 as the claimed "planar stent"). Third, even if the claim were construed to require it, we agree with the Examiner that the structure depicted in Figures 6-10 of Lau and cited by the Examiner is also reasonably read as a "planar stent" made from planar wire or ribbon. Ans. 3. See also, Spec. 14, para. [0075]; figs. 16-18. The Examiner articulates, and Lau discloses, a sufficient reason for the proposed

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substitution. Appellant has not established the Examiner relied on knowledge gleaned only from Appellant's disclosure.

Lau suggests that using the structure depicted in Figures 6-10 as an alternative to the wire depicted in Figures 1-5 would enable the stent to be formed out of flat sheet. Col. 13, ll. 19-20. Thus, the Examiner's proposed modification amounts to the simple substitution of known elements with predictable results and therefore would have been obvious to one having ordinary skill in the art.

The reasoning articulated by the Examiner for the proposed modification need not be derived from the prior art itself. See *In re Jacoby*, 309 F.2d 513, 516 (CCPA 1962) (an artisan must be presumed to know something about the art apart from what the references disclose). The Examiner concluded that employing the structure depicted in figures 6-10 of Lau would change the surface area of the stent and graft exposed to the adhesive surface of Leopold's tape. Ans. 3. We are mindful of the fact that, as noted by Appellant, Leopold expresses the desirability of increasing the potential bonding surface area between the tape member 128 and graft 124. Reply Br. 2-3; Leopold col. 9, ll. 25-46. However, we disagree that this would lead the skilled artisan away from modifying Leopold to incorporate the structure depicted in figures 6-10 of Lau. Adjusting the adhesion strength between the tape and stent or tape and graft is a simple detail of construction that could be left to the skilled artisan to decide. “[A] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007).

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DECISION

For the above reasons, the Examiner's rejection of claims 1, 3, 6-8, 12 and 13 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). See 37 C.F.R. § 1.136(a)(1)(iv) (2009).

AFFIRMED

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